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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,773	01/30/2004	Kevin M. Goodwin	200208943-1	5557

22879	7590	09/20/2006	

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EXAMINER
UNELUS, ERNEST

ART UNIT	PAPER NUMBER
2181	

DATE MAILED: 09/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/767,773	GOODWIN, KEVIN M.
	Examiner	Art Unit	
	Ernest Unelus	2181	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _30 January 2004_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-8_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-8_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _30 January 2004_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

FRITZ FLEMING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100
9/18/2006

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   The instant application having Application No. 10/767,773 has a total of 8 claims

pending in the application; there are 3 independent claims and 5 dependent claims, all of which

are ready for examination by the examiner.

I. INFORMATION CONCERNING OATH/DECLARATION

Oath/Declaration

2.   The applicant's oath/declaration has been reviewed by the examiner and is found to

conform to the requirements prescribed in **37 C.F.R. 1.63.**

II. INFORMATION CONCERNING DRAWINGS

Drawings

3.   The applicant's drawings submitted are acceptable for examination purposes.

III. REJECTIONS NOT BASED ON PRIOR ART

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the
> subject matter which the applicant regards as his invention.

5.   **Claim 3-6** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

6.   As per **claim 3**, it discloses the limitation "at least one of a first transition and a second transition". The rest of the limitation for this claim, which express the two transitions, renders this claim as vague and indefinite. The two transitions are interconnected; in other word, the first transition goes from prevented state to read-only while the second transition goes from read-only to prevented state. The preamble of this claim stated "at least one". Even thought the preamble say one or the other, the action in the first transition is part of the second transition while the action in the second transition is part of the first.

As per **claims 4 and 5**, they are depended on claim 3, which discloses a selection of either a first transition or a second. The rest of the limitation for this claim, which express the two transitions, renders this claim as vague and indefinite. In other word, if someone would selection the second transition, discloses a first transition in claims that depended on claim 3 makes it indefinite.

IV. <u>REJECTIONS BASED ON PRIOR ART</u>

<u>Claim Rejections - 35 USC § 102</u>

7.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8.   **Claims 1-8** are rejected under 35 U.S.C. 102(b) as being anticipated by Shaath et al. (US pub. 2002/0078295).

9.   As per **claim 1**, Shaath discloses "A method of controlling access to a volume at least a

portion of which is on a storage-device such that communication between an input/output (I/O)

initiator and the storage-device takes place via a stack of device objects (DOs) representing the

volume, the method comprising **(see paragraph 0044 and 0047)**: providing the stack, the DOs

in the stack being arranged according to a first I/O state for the volume **(see paragraph 0057)**;

and selectively switching to a second I/O state for the volume without completely tearing down

the stack **(see paragraphs 0044, 0045, and 0047, which describe how the IO manager switch**

a request to different sate (driver) base on the requirement of the request. See paragraph

0067, which describe how the IO manager move from one stack to another , which is

incompletely tearing down one stack and rebuilding another for a particular request. For

example, a request can lead to being process, having access to read/write or not being

process at all).

10.   As per **claim 2**, Shaath further discloses "The method of claim 1," **[See rejection to**

claim 1 above] comprising: receiving an input/output request packet (IRP) **(paragraph 0044**

discloses receiving the I/O request packet); changing I/O states based upon a mode-switching

(MS) control-code included in the IRP" **(see paragraphs 0044, which discloses not accepting a**

particle request and sending it to a particle driver).

11.   As per **claim 3**, Shaath further discloses "changing I/O states according to <u>at least one</u> of

a first transition **(the read-only access)** and a second transition; the first transition going from a

prevented-state in which I/O is blocked to a read-only-state in which access is restricted to read-

only type access **(see paragraph 0067 and fig. 4, which disclose read-only)**; the second

transition going from the read-only-state to the prevented state" **(see paragraph 0067 and fig. 4,**

which disclose prevention of a request).

12.   As per **claim 4**, Shaath further discloses "incompletely tearing down, and then rebuilding,

the stack in order to a achieve either the first <u>or</u> second transition **(see paragraph 0074 and fig.**

5, which discloses the rebuilding of a request to have it process).

13.   As per **claim 5**, Shaath further discloses "changing states according to <u>at least one</u> of the

<u>first</u> and second transitions, a third transition, a fourth transition, a fifth transition and a sixth

transition **(see paragraph 0074 and fig. 5, which discloses the rebuilding of a request to have**

it process); the third transition going from the prevented-state to a full-access state in which full

data-read and full data-write (full read/write) access is permitted **(Shaath discloses multiple**

type of data file; see paragraph 007, which discloses read and write access for a particular

data file, which is a transition; in other word, each data file required a particular

transition); the fourth transition going from the full-access state to the prevented-state **(see**

paragraph 007); the fifth transition going from the read-only state to the full-access state **(see**

paragraph 007); and the sixth transition going from the full-access state to the read-only

state**(see paragraph 007).**

14.   As per **claim 6**, Shaath further discloses "incompletely tearing down, and

then rebuilding, the stack in order to a achieve either the third <u>or</u> fourth transition **(see paragraph 0067, which describe how the IO manager move from one stack to another , which is incompletely tearing down one stack and rebuilding another for a particular request. For example, a request can lead to being process, having access to read/write or not being process at all).**

15.   As per <u>**claim 7**</u>, Shaath discloses "A machine-readable medium including instructions execution of which by a machine selectively controls access to a volume at least a portion of which is on a storage-device such that communication between an input/output (I/O) initiator and the storage-device takes place via a stack of device objects (DOs) representing the volume, the machine-readable instructions comprising **(see paragraph 0044 and 0047)**: a code segment that contributes to building the stack, the DOs in the stack being arranged according to a first input/output (I/O) state **(see paragraph 0057)**; and a code segment for selectively switching to a second I/O state without completely tearing down the stack **(see paragraphs 0044, 0045, and 0047, which describe how the IO manager switch a request to different sate (driver) base on the requirement of the request. See also paragraph 0067, which describe how the IO manager move from one stack to another , which is incompletely tearing down one stack and rebuilding another for a particular request. For example, a request can lead to being process, having access to read/write or not being process at all).**

16.   As per <u>**claim 8**</u>, Shaath discloses "An apparatus for controlling access to a volume at least a portion of which is on a storage-device such that communication between an input/output (I/O)

initiator and the storage-device takes place via a stack of device objects (DOs) representing the

volume, the apparatus comprising **(see paragraph 0044 and 0047)**: a memory in which is

created the stack, the DOs in the stack being arranged according to a first input/output (I/O) state

(see paragraph 0057); and filter driver means for selectively switching to a second I/O state

without completely tearing down the stack **(see paragraphs 0044, 0045, and 0047, which**

describe how the IO manager switch a request to different sate (driver) base on the

requirement of the request. See also paragraph 0067, which describe how the IO manager

move from one stack to another , which is incompletely tearing down one stack and

rebuilding another for a particular request. For example, a request can lead to being

process, having access to read/write or not being process at all).

V. RELEVANT ART CITED BY THE EXAMINER

17.   The following prior art made of record and not relied upon is cited to establish the level

of skill in the applicant's art and those arts considered reasonably pertinent to applicant's

disclosure. See **MPEP 707.05(c)**.

The following reference teaches a method of controlling access to a volume at least a portion of

which is on a storage-device such that communication between an (I/O) initiator and the storage-

device

U.S. PATENT NUMBER

US 6,820,146

US 5,606,681

US 2002/0069245

US 2005/0149525

US 6,704,819

VI. CLOSING COMMENTS

Conclusion

a. STATUS OF CLAIMS IN THE APPLICATION

18.   The following is a summary of the treatment and status of all claims in the application as recommended by **M.P.E.P. 707.07(i)**:

a(1) CLAIMS REJECTED IN THE APPLICATION

19.   Per the instant office action, claims 1-8 have received a first action on the merits and are subject of a first action non-final.

b. DIRECTION OF FUTURE CORRESPONDENCES

20.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

IMPORTANT NOTE

21.   If attempts to reach the above noted Examiner by telephone is unsuccessful, the Examiner's supervisor, Mr. Fritz M. Fleming, can be reached at the following telephone number: Area Code (571) 272-4145.

The fax phone number for the organization where this application or proceeding is

assigned is 571-273-8300. Information regarding the status of an application may be obtained

from the Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For more

information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions

on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free).

August 15, 2006   Ernest Unelus
                                              Examiner
                                              Art Unit 2181

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